

REMARKS

Reconsideration and allowance in view of the following remarks are respectfully requested. Claims 7, 8, 10, 13 and 18-31 remain pending for examination.

THE REJECTION UNDER 35 U.S.C. §102(e)

Claims 7-8, 20-21, 25-26, 28 and 31 were rejected under 35 U.S.C. §102(e) as being anticipated by Margulis et al. (U.S. Patent 6,223,149; hereafter "Margulis"). The Applicant respectfully traverses this rejection, primarily upon the assertion that Margulis is fundamentally deficient with respect to Claim 7 and Claim 20, which are the base claims from which the remaining rejected claims listed above depend. Therefore, the Applicant respectfully requests that this rejection be reconsidered and withdrawn.

Claim 7 recites, in part (emphasis added):

"In a distributed system including a plurality of redundant components, *a method for performance by a first redundant component*, comprising:

transmitting information particular to *the first component* to other components in the plurality of redundant components, *the information relating to one or more criteria according to which a currently-active leader component is to be determined*,"

With regard to this portion of Claim 7, the rejection refers to Col. 8, lines 1-15 of Margulis, which describes a LAN Emulation Configuration Server (LECS) establishing a connection with a LAN Emulation Server (LES) in order to see which LES is still active. However, the rejection does not clearly state which of the LECS or the LES is purported to anticipate the “*first component*” recited in Claim 7. Regardless, the Applicant submits that Claim 7 is not taught or suggested by Margulis.

More particularly, Margulis describes two server types, the LECS and the LES, which perform completely different actions than the other, whereas Claim 7 recites one component type, which performs multiple actions. Thus, Margulis does not teach or suggest the claimed one component type that performs all of the actions as in Claim 7; more particularly Margulis does not demonstrate that the functions of a LES and a LECS may be combined to even suggest the first component of Claim 7.

Points (a) and (b) below lay out some reasons why the *first component* recited in Claim 7 is not taught or suggested by the LECS or LES described by Margulis, either singularly or in combination together:

(a) The LECS described by Margulis does not teach the “first component” recited by Claim 7 for at least two reasons. First, Margulis describes an LECS establishing a connection with each LES, but Margulis does not describe the LECS actually transmitting

information particular to itself to other components. In contrast, Claim 7 recites “*transmitting information particular to the first component...*” which clearly is not taught by Margulis.

Further, Margulis describes, in Col. 8, lines 1–3 (emphasis added):

“When the LECS initializes (step 50) *it attempts to establish connections* to all the LESs (step 52).....”

This portion of Margulis does not teach the “transmitting information” recited in Claim 7, but rather describes establishing connections to the other LESs. In fact, Margulis teaches that the next active LES is chosen from a local database maintained by each LECS, so “transmitting information” does not need to take place. From Margulis, Col. 8, lines 10–12:

“Note that all the LECSs have the same list of LESs sorted in the same order, thus they will all choose the same LES to be the active LES.”

Secondly, the actions of the LECS described by Margulis do not anticipate the steps recited in Claim 7, particularly (emphasis added):

“wherein if the *first component* determines that it is not the currently-active leader component—the *first component does not know which component of the other*

components is the currently-active leader component

Rather, the LECS described by Margulis *does know* which component is the active leader, in contrast to the recitation of Claim 7. Indeed, the job of the LECS described by Margulis is to appoint the leader. Thus, the actions of the LECS that was described by Margulis do not anticipate the steps performed in Claim 7.

(b) The actions of the LES described by Margulis do not anticipate the steps performed by the “first component” described in Claim 7. Claim 7 recites (in part) “*transmitting information particular to the first component to other components*”. However, Margulis only describes the LES as receiving a request to establish a connection from an LECS, and it does not describe the LES as transmitting information particular to itself, as in Claim 7.

Additionally, Claim 7 recites in part:

“In a distributed system including a plurality of redundant components, a method for performance *by a first redundant component*, comprising:

...

determining whether the first component is the currently-active leader component by comparing the information particular to the first component with the information particular to the redundant components,”

On the other hand, according to Margulis, the LES *does not* determine whether it is the active leader, and the LES *does not* compare information about itself with information from other components. In Margulis, only the LECS can determine the active leader, and it is the LECS that compares information between components (using the database stored on the LECS). Hence the actions of the LES described by Margulis do not anticipate the steps recited in Claim 7.

Accordingly, it is respectfully submitted that the rejected Claim 7 and corresponding dependent Claim 8 are patentably distinguishable over Margulis, for at least the reasons discussed above.

It is also respectfully submitted that the rejected Claim 20, and corresponding dependent claims 21, 25-26, 29 and 31 are patentably distinguishable over Margulis for at least the reasons that follow.

For instance, Claim 20 recites, in part (emphasis added):

“exchanging currently-active leader election criteria information among the plurality of redundant components; and”

On the other hand, Margulis does not disclose exchanging the currently-active leader election criteria information. Instead, the system described in Margulis has only the LECS determine the currently active leader, and *each LECS* does that by maintaining a database of leader candidates, listing each LES in the same sorted

order, and choosing the next LES as the leader depending on the ability to establish a connection to each LES. Since each LECS has the LESs listed in the same order in their databases, the LECSs do not need to communicate with each other regarding the next leader LES (since each LECS can use its own database). This shortcoming, relative to rejected Claim 20, is emphasized in Margulis, Col. 7, lines 46–50 (emphasis added):

“It is important to note that the method functions without employing protocols between LECSs, thus each LECS is not aware of the existence of other LECSs.”

Additionally, as in the remarks earlier, Margulis defines roles for components, such as a LES and a LECS. Claim 20 recites, in part (emphasis added);

“at each component in the plurality of redundant components:

(a) determining whether the component is the currently-active leader component, based on the currently-active leader election criteria information; and

(b) repeating the determining whenever the component detects an occurrence of a failure possibly affecting the currently-active leader component,

wherein, if the component determines that it is not the currently-active leader component, the component does not know

which other component in the plurality of redundant components is the currently-active leader component.”

Margulis only describes an LECS determining the leader. The LECS recited by Margulis does not anticipate Claim 20, which recites in part:

“wherein, if the component determines that it is not the currently-active leader component, the component does not know which other component in the plurality of redundant components is the currently-active leader component.”

As discussed in the remarks above, the LECS *does know* which other component is the active leader.

Additionally, the actions of the LES described by Margulis do not anticipate the steps performed by the first component recited in Claim 20, because a LES does not perform either of the steps below from Claim 20:

“determining whether the component is the currently-active leader component, based on the currently-active leader election criteria information; and
repeating the determining whenever the component detects an occurrence of a failure possibly affecting the currently-active leader component,”

Accordingly, for at least the reasons provided above, it is respectfully submitted that the rejected Claim 20 and

corresponding dependent Claim 21 are patentably distinguishable over Margulis, for at least the reasons discussed above.

Additionally, Applicant disagrees that Margulis teaches a “redundant instance of a daemon”, or a “system management daemon”. Indeed, these features are neither taught nor suggested by Margulis.

Applicant also respectfully requests that the rejection under 35 U.S.C. §102(e) be reconsidered and withdrawn with regard to dependent Claims 25–26, 29 and 31. Claims 25–26, 29 and 31 are dependent on Claim 20, and as Applicant has discussed above, Margulis does not describe all the elements of Claim 20.

THE REJECTION UNDER 35 U.S.C. §103(a)

Claims 10, 13, and 18–19, 22–24, 27, and 29–30 were rejected under 35 U.S.C. §103(a) as being unpatentable over Margulis. The Applicant respectfully traverses this rejection, and further requests that this rejection be reconsidered and withdrawn.

Claim 10 depends from independent Claim 7, which has been patentably distinguished over Margulis for at least the reasons set forth above regarding the rejection over 35 U.S.C. §102(e). Therefore, the arguments presented above regarding Claim 10 may be applied to the present rejection as well.

Additionally, Applicant respectfully disagrees with the assertion in the rejection that Margulis discloses that a node with

which the connection was longest is chosen as the currently active component, as in Claim 10. Margulis teaches away from choosing the oldest LES, and instead teaches using the currently active LES, regardless of how long the connection was maintained. From Col. 8, lines 49–53, Margulis describes:

“In either of the above two cases, the LECS chooses the next available LES to be the active LES (step 66). After the new LES is declared the active LES, it remains the active LES even in the event that the connection to the failed LES having a priority is reestablished.”

Additionally, in Margulis, it is important to note that age information is not *transmitted*, yet Claim 10 recites, in part **“wherein the transmitting the information particular to the first component comprises transmitting age information”**. Moreover, Margulis teaches away from such transmission. In Col. 4, lines 48–52, Margulis describes:

“The method is operative to provide redundancy in the event of a LES failure without requiring database synchronizations of the LECSs and their associated complex message protocol exchanges.”

While Margulis discloses that each LECS must list the LESs in the same order on the database maintained by each LECS, Margulis does not disclose how the LESs should be ordered in the database maintained by each LECS. There is no teaching or suggestion as to

how it should determine the LESs be ordered. Thus, the LECS described by Margulis does not describe choosing the next active leader via age information, which Claim 10 requires.

With regard to the rejection of independent Claim 13, Applicant respectfully disagrees that Margulis teaches the “weak leader election approach”. Claim 13 recites, in part:

“a currently-active leader component
elected from the plurality of redundant
components *by way of a weak leader election
approach.*”

The Applicant submits that the “weak leader approach” has been patentably distinguished over Margulis for at least the reasons set forth above regarding the rejection over 35 U.S.C. §102(e).

The rejection also states “Margulis does teach that the node with which the connection was longest is chosen”. Applicant disagrees, since, as argued above, Margulis describes choosing a leader based on the selection of the next available LES from a database maintained by each LECS, but does not disclose detail about choosing a LES based on the age of the connection.

With regard to the rejection of Claim 18, Applicant notes that Claim 18 depends from Claim 7. The Applicant submits that Claim 7 has been patentably distinguished over Margulis for at least the reasons set forth above regarding the rejection over 35 U.S.C. §102(e).

With regard to the rejection of Claim 19, Applicant notes that Claim 19 depends on Claim 13. The Applicant submits that Claim 13 has been patentably distinguished over Margulis for at least the reasons set forth above regarding the rejection over 35 U.S.C. §103(a) listed above.

With regard to the rejection of Claims 22–24, Applicant notes that Claims 22–24 depend on Claim 20. The Applicant submits that Claim 20 has been patentably distinguished over Margulis for at least the reasons set forth above regarding the rejection over 35 U.S.C. §102(e).

With regard to the rejection of Claims 27 and 29–30, Applicant notes that Claims 27 and 29–30 depend on Claim 20. The Applicant submits that Claim 20 has been patentably distinguished over Margulis for at least the reasons set forth above regarding the rejection over 35 U.S.C. §102(e).

Additionally, Applicant respectfully disagrees that the concepts and advantages of using daemon processes or agent processes to monitor a power line would have been obvious to one of ordinary skill in the art. Margulis is specifically concerned with LAN Emulation networks, and makes no mention of networks inside of a home, or of use of daemons or of agents. There is no teaching or suggestion to combine the work of Margulis with art in the area of home networks, or with daemons. If this point is to be persisted, Applicant respectfully requests a publication or article that is to be

combined with Margulis that teaches use of daemons or agents, and for which there is a teaching or suggestion to combine with LAN Emulation networks.

CONCLUSION

All objections and rejections having been addressed, it is respectfully submitted that the present application is now in condition for allowance. Early and forthright issuance of a Notice of Allowability is respectfully requested.

Respectfully Submitted,

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Dated: May 6, 2005

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